

For the purposes of determining minimum plumbing fixtures only, we request that the actual occupant load of 25 be permitted for plumbing design occupant load.

The intended use of our space and, more specifically our practice area, is the training and skill development of martial arts tricking. Martial arts tricking is characterized by its combination sequences of flips, twists, and kicks. These combinations, although intended to be linear, often curve and deviate from side to side, especially during the learning process.

Our practice area (1,492 sqft) currently has an occupancy of 50 sqft per occupant, leading to an occupant load of 30. Due to the nature of our sport, we are asking for the occupancy of the practice area to be increased to 100 sqft per occupant. This will result in an occupant load of 15 occupants for the practice area and a total occupant load of 25 for the full area (plumbing fixtures only).



Issue Date	May 3, 2010
Code/Section	2018 IBC, Sections 1004.5, Exception; Section 2902.1
Developed By:	David McCarthy, P.E., Plumbing Technical Lead
Revised By:	John Brean, P.E. Mechanical Plans Engineer, September 17, 2020

Issue:

Develop a policy and procedure for using the exception to IBC section 1004.5 for the purpose of determining minimum plumbing fixtures per IBC section 2902.1.

Interpretation:

As an exception to the calculation method found in IBC section 1004.5, the actual number of occupants for a space may be used, as approved by the Building Official. In order to use this exception, statistical data must be submitted by the owner of the space.

The owner must submit a letter requesting the actual occupant load to be permitted for the plumbing design occupant load. The following items must be met with the letter and architectural cover sheet for reduced plumbing fixtures:

- ☐ Occupancy classification *B*
- ☐ Area in square feet of the proposed occupancy *2812*
- ☐ Calculated occupant load, per code, for both men and women
- ☐ Proposed occupant load, per code, for both men and women
- ☐ Calculated minimum plumbing fixture count for both men and women
- ☐ Proposed minimum plumbing fixture count for both men and women
- ☐ The reason why the request for reduced plumbing fixtures is being submitted
- ☐ Letter must be signed by the owner under notary seal and signature
- ☐ Notarized letter must be affixed to the architectural cover sheet for field evaluation and record keeping purposes

The letter shall be submitted to the plan reviewer. The plan reviewer will forward it to the Plumbing Code Consistency Coordinator for review and acceptance. If accepted, the permit scope of work description shall state that the actual occupant load, per the owner, is being used for plumbing only, per their letter dated _____. The letter shall be scanned for Records with the building permit.

1004.1.2 Areas without fixed seating.

The number of occupants shall be computed at the rate of one occupant per unit of area as prescribed in Table 1004.1.2. For areas without *fixed seating*, the occupant load shall be not less than that number determined by dividing the floor area under consideration by the *occupant load* factor assigned to the function of the space as set forth in Table 1004.1.2. Where an intended function is not listed in Table 1004.1.2, the *building official* shall establish a function based on a listed function that most nearly resembles the intended function.

Exception: Where *approved* by the *building official*, the actual number of occupants for whom each occupied space, floor or building is designed, although less than those determined by calculation, shall be permitted to be used in the determination of the design *occupant load*.

TABLE 1004.1.2 MAXIMUM FLOOR AREA ALLOWANCES PER OCCUPANT

BUILDING CODE DATA

LOT SIZE 1.46 ACRES
 AREA OF WORK 2,812 SF
 NO CHANGE TO BUILDING FOOTPRINT

CONSTRUCTION TYPE
 PER IBC 602 VB

OCCUPANCY CLASSIFICATION
 PER IBC 302

EXISTING OCCUPANCY:
 F-1 MILLWORK (SASH AND DOOR)

PROPOSED OCCUPANCY:
 B TRAINING AND SKILL DEVELOPMENT PER IBC 304.1
 MARTIAL ARTS TRAINING GYM
 S STORAGE

EXISTING OCCUPANCY LOAD CALCULATION (PER IBC 1004.1)

NAME	AREA	OCCUPANCY	OCCUPANTS
EXISTING F-1	2812 SF	MANUFACTURING (200G/SF)	15 OCCUPANTS

TOTAL: 15 OCCUPANTS

OCCUPANCY LOAD CALCULATION (PER IBC 1004.1)

Name	Area	Occupancy	Occupants
PRACTICE AREA	1492 SF	50	30
RECEPTION	405 SF	150	3
BUSINESS	694 SF	150	5
STORAGE	146 SF	300	1
STORAGE	55 SF	300	1

TOTAL: 40 OCCUPANTS

NUMBER OF EXITS

MINIMUM PLUMBING FIXTURES
 PER IBC TABLE 2902.1

TOTAL OCCUPANCY 40 OCCUPANTS

WATER CLOSETS: 1 / 25 FOR THE FIRST 50 OCCUPANTS
2 WATER CLOSETS REQUIRED
2 WATER CLOSETS PROVIDED

LAVATORIES 1 / 40
2 LAVATORIES REQUIRED
2 LAVATORIES PROVIDED

SERVICE SINK 1 REQUIRED
 DRINKING FOUNTAIN 1 REQUIRED

2902.1.2 SINGLE USER TOILET FACILITIES

SINGLE USER TOILET FACILITIES SHALL BE IDENTIFIED FOR USE BY EITHER SEX

1109.2 TOILET AND BATHING FACILITIES

EACH TOILET ROOM AND BATHING ROOM SHALL BE ACCESSIBLE. EXCEPTIONS

3. WHERE MULTIPLE SINGLE-USER TOILET ROOMS OR BATHING ROOMS ARE CLUSTERED AT A SINGLE LOCATION, AT LEAST 50 PERCENT BUT NOT LESS THAN ONE ROOM FOR EACH USE AT EACH CLUSTER SHALL BE ACCESSIBLE.

ACCESSIBLE FACILITIES: AT LEAST 50%
1 ACCESSIBLE FACILITY REQUIRED
1 ACCESSIBLE FACILITY PROVIDED

LAND USE CODE DATA

ALLOWED USES (EDMONDS CITY CODE CHAPTER 16)

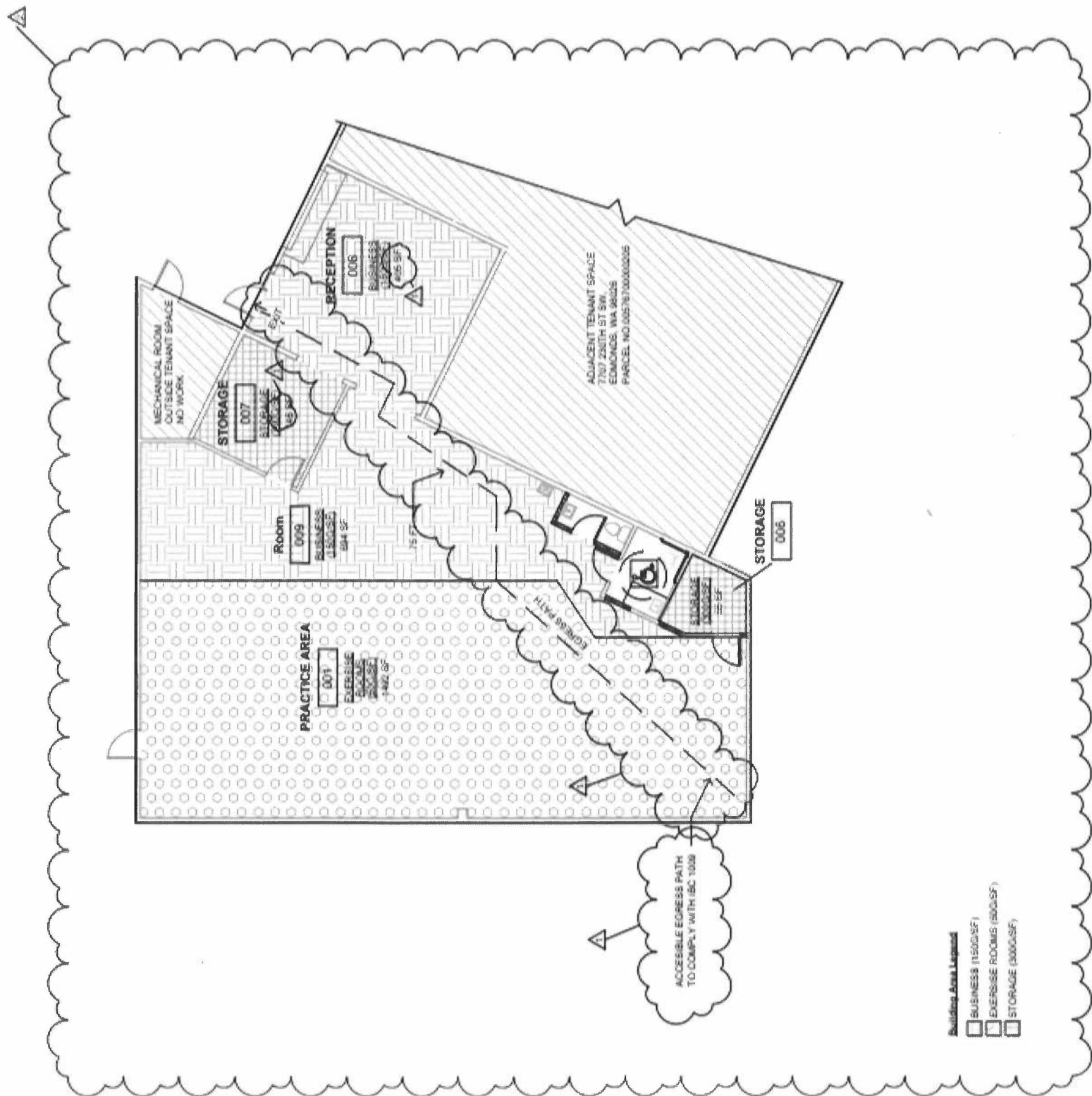
EXISTING USE
 GENERAL COMMERCIAL

PROPOSED USE:
 GENERAL COMMERCIAL

PARKING STANDARDS (EDMONDS CITY CODE 17.50.010)

COMMERCIAL RECREATION - ONE SPACE PER 500 SQUARE FEET

6 PARKING SPACE REQUIRED
24 PARKING SPACE PROVIDED



Building Area Legend

- ☐ BUSINESS (1500SF)
- ☐ EXERCISE ROOMS (800SF)
- ☐ STORAGE (3000SF)